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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,908	08/28/2006	Taketoshi Nakao	061352-0138	4393

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EXAMINER	
HUNTER, QUINN T	

ART UNIT	PAPER NUMBER
2835	

MAIL DATE	DELIVERY MODE
01/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,908	NAKAO ET AL.	
	Examiner	Art Unit	
	QUINN HUNTER	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/28/2006 and 08/28/2007 and 11/21/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-19 and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuoka et al (US 6,104,451) with Takahashi (US 6,807,051 B2) as extrinsic evidence.

In re claim 15, Matsuoka et al discloses:

- a flat display panel (100, Fig 1)
- a front cover (1010, fig 1) having an opening matching a display surface of said flat display panel
- a casing having first and second casing sections (1020, fig 1 and 220, fig 2) and covering a rear side of said flat display panel, said first casing section having a lower thermal conductivity than said second casing section (col 3, lines 40-42 and col 4, lines 59-62), extending upwardly from said second casing section, and being provided with a vent hole (shown Fig 3d)

In re claim 16, Matsuoka et al discloses wherein said first casing section is in contact with an end portion of said second casing section (see Fig 1 Matsuoka et al enclosed). Note that contact between a first and second casing sections is more explicitly disclosed in prior art such as Takahashi at 12, Fig 8 and 16, fig 9, such that

specific second casing section materials were used for problems encountered at this interface between casing sections.

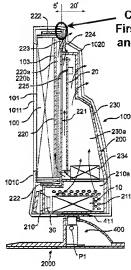

FIG. 1

Fig 1 Matsuoka et al enclosed

In re claim 17, Matsuoka et al discloses, wherein said first casing section (1020) and said second casing section (220) define a clearance therebetween.

In re claims 18 and 19, Matsuoka et al discloses, wherein said first casing section is formed from a material comprising resin (col 3, lines 40-42), while said second casing section formed from a material comprising metal (col 4, lines 59-62).

In re claim 32, Matsuoka et al discloses a function of exhausting air through the vent hole (using 224, Fig 1).

In re claim 33, Matsuoka et al discloses a function of taking in air through the clearance (using 234, fig 1).

In re claim 34, Matsuoka et al discloses wherein said flat display panel is a plasma display panel (col 17, lines 25-30).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuoka et al (US 6,104,451).

In re claims 20 and 21, Matsuoka et al discloses the claimed invention except wherein said first casing section has a thermal conductivity of not less than 0.02 J/msK and less than 1.5 J/msK, while said second casing section has a thermal conductivity of not more than 2320 J/msK and more than 80 J/msK. It would have been obvious to one skilled in the display enclosure art to make a first casing section have a thermal conductivity of not less than 0.02 J/msK and less than 1.5 J/msK and second casing section have a thermal conductivity of not more than 2320 J/msK and more than 80 J/msK, so keep heat dissipation occurring in a central location while keeping an outside cool to a users interaction, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In re claims 22 and 23, Matsuoka et al discloses the claimed invention except wherein a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 7/10. It would have been

obvious to one skilled in the display enclosure art at the time the invention was made to have made a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 7/10, to accommodate differently sized displays, since such a modification would have involved a mere change in the size of a component and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955)

Also, It would have been obvious to one skilled in the display enclosure art at the time the invention was made to have made a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 7/10, to accommodate differently sized displays, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In re claim 24, Matsuoka et al discloses an extended portion (230, fig 1) extending continuously with said second casing section (222, fig 1 and 220, Fig 2), and a cover portion (part of 1020 Fig 1) layered to cover an outer surface of said extended portion, said cover portion extending upwardly while being in contact with the outer surface of said extended portion. Matsuoka et al lacks the extended portion as comprising the same material as said second casing section.

It would have been obvious to one skilled in the display enclosure art at the time the invention was made to make a extended portion of Matsuoka to be of the same material as a second casing section, to help absorb heat energy incident to the

extended portion, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In re claim 25, Matsuoka et al discloses a separated portion (230, fig 1) spaced by a clearance from said second casing section (at 230a, fig 1), and a cover portion (part of 1020 Fig 1) layered to cover an outer surface of said separated portion, said cover portion (part of 1020 Fig 1) extending upwardly while being in contact with the outer surface of said separated portion. Matsuoka et al lacks the separated portion as comprising the same material as said second casing section.

It would have been obvious to one skilled in the display enclosure art at the time the invention was made to make a separated portion of Matsuoka to be of the same material as a second casing section, to help absorb heat energy incident to the separated portion, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In re claims 26 and 27, Matsuoka discloses Matsuoka et al discloses, wherein said first cover portion is formed from a material comprising resin (col 3, lines 40-42), while said second casing section formed from a material comprising metal (col 4, lines 59-62)

In re claims 28 and 29, Matsuoka et al discloses the claimed invention except wherein said first cover portion has a thermal conductivity of not less than 0.02 J/msK and less than 1.5 J/msK, while said second casing section has a thermal conductivity of not more than 2320 J/msK and more than 80 J/msK. It would have been obvious to one skilled in the display enclosure art to make a cover portion have a thermal conductivity of not less than 0.02 J/msK and less than 1.5 J/msK and second casing section have a thermal conductivity of not more than 2320 J/msK and more than 80 J/msK, so keep heat dissipation occurring in a central location while keeping an outside cool to a users interaction, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

In re claims 30 and 31, Matsuoka et al discloses the claimed invention except wherein a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 4/10. It would have been obvious to one skilled in the display enclosure art at the time the invention was made to have made a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 4/10, to accommodate differently sized displays, since such a modification would have involved a mere change in the size of a component and a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955)

Also, It would have been obvious to one skilled in the display enclosure art at the time the invention was made to have made a value obtained by dividing a vertical width of said first casing section by a vertical width of said casing be more than 1/10 and less than 4/10, to accommodate differently sized displays, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sung (US 7,405,925 B2), Kim (US PG PUB 2005/0157457 A1), Lee et al (US PG PUB 2005/0105259 A1), Sung et al (US 6,894,739 B2), Heirich (US 5,806,940), O'Brien et al (US 5,587,786), Kuo (US 6,697,250 B2), Nomoto et al (US 7,091,665 B2), Huang (US 6,614,656 B1), and Lee et al (US PG PUB 2005/0117283 A1) disclose a display panel with casings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUINN HUNTER whose telephone number is (571)270-3910. The examiner can normally be reached on Mon.-Fri., 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quinn Hunter
Examiner
Art Unit 2835

/Jayprakash N Gandhi/
Supervisory Patent Examiner, Art Unit 2835